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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/646,737	(	08/25/2003	Tamami Takahashi	2003_1186	2003_1186 1785	
513	7590	06/28/2004		EXAM	EXAMINER	
	•	ID & PONACK, L.	DONOVAN,	DONOVAN, LINCOLN D		
2033 K STR SUITE 800	EET N. W	7.		ART UNIT	PAPER NUMBER	
WASHING	ON, DC	20006-1021		2832		

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

			<u> </u>
	Applicati n N .	Applicant(s)	
	10/646,737	TAKAHASHI ET AL.	
Offic Action Summary	Examiner	Art Unit	
	Lincoln Donovan	2832	·
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	ith the corresp nd nce address	
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATIOI  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a  If NO period for reply is specified above, the maximum statutory peri Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of thir od will apply and will expire SIX (6) MOI tute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. THS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	i.
Status			
1) Responsive to communication(s) filed on			
	his action is non-final.		
3) Since this application is in condition for allow		ters, prosecution as to the merits is	
closed in accordance with the practice unde	·	· •	
Disposition of Claims	•		
<ul> <li>4) ☐ Claim(s) 3 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withd</li> </ul>			
5) Claim(s) is/are allowed.	rawn ironi consideration.		
6)⊠ Claim(s) <u>share rejected.</u>			
7) Claim(s) is/are objected to.		•	
8) Claim(s) are subject to restriction and	d/or election requirement.		
,	area electronical and a second		
Application Papers			
9) The specification is objected to by the Exami			
10) The drawing(s) filed on is/are: a) a	· · ·	•	
Applicant may not request that any objection to the	*	` '	
Replacement drawing sheet(s) including the corr			).
11) The oath or declaration is objected to by the	Examiner. Note the attached	d Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) △ Acknowledgment is made of a claim for forei  a) △ All b) ☐ Some * c) ☐ None of:  1. △ Certified copies of the priority docume  2. ☐ Certified copies of the priority docume  3. ☐ Copies of the certified copies of the priority docume  application from the International Bure	ents have been received. ents have been received in A riority documents have been	pplication No	
* See the attached detailed Office action for a li	ist of the certified copies not	received.	
Attachment(s)			
Notice of References Cited (PTO-892)	4) Interview !	Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(	s)/Mail Date	
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date</li> </ul>	08) 5)	nformal Patent Application (PTO-152)	

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art shown in figure 1 (AAPA, hereinafter) in view of Wölfges [DE 19907732].

AAPA discloses a solenoid [100] having a cylindrical excitation coil [104] and a plunger [102] movable within the excitation coil, the solenoid being adapted to generate a magnetic force to move the plunger when an electric current is applied to the excitation coil, wherein a side of the plunger compartment accommodating the plunger and fluid is closed as a cover [106] formed of a magnetic material and a cylindrical projection [107] projecting from the cover portion in such a manner as to surround a part of an outer periphery of the plunger and the cover being provided with a through hole extending therethrough.

AAPA disclose the instant claimed invention except for the cover including a pair of throughholes extending through from an upper portion to a bottom portion thereof.

Wölfges discloses a solenoid [figure 1] having a plunger [30] mounted within a housing including a pair of throughholes on upper and lower portions thereof.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the throughhole design of Wölfges in AAPA in order to provide displacement venting for the air within the plunger cavity.

AAPA, as modified, discloses the claimed invention except for the throughholes being mounted on the cover instead of the plunger. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the throughholes in the cover instead of the plunger, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is (571) 272-1988. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2832

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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